

C L A I M S

1. Reactor system suitable for carrying out chemical reactions, comprising one or more common reactant feed lines, two or more single unit operated reactor sections and one or more common product discharge lines.

5 2. Reactor system according to claim 1, which system comprises between 3 and 8 single unit operated reactor sections, preferably 4, each reactor section preferably being a separated, individual chemical reactor.

10 3. Reactor system according to claim 1 or 2, in which each reactor section comprises one or more catalyst beds, preferably a reactor system in which each reactor section comprises a multitubular fixed bed catalyst arrangement.

15 4. Reactor system according to any of claims 1 to 3, in which each of the reactor sections comprises an indirect heat exchange system, which heat exchange systems are jointly operated, preferably a reactor system in which the heat exchange system comprises a thermo siphon system.

20 5. Reactor system according to any of claims 1 to 4, which system comprises one common gas reactant feed line.

6. Reactor system according to any of claims 1 to 5, which system comprises one common gas product discharge line.

25 7. Reactor system according to any of claims 1 to 6, which system comprises one common liquid reactant discharge line or which system comprises one common liquid product discharge line.

8. Reactor system according to any of the preceding claims for use in the Fischer Tropsch synthesis,

preferably a reactor system in which the reactor sections comprise a cobalt catalyst.

9. Reactor system according to any of claims 1 to 8, in which each reactor section is comprised in an individual reactor.

10. Process for the preparation of hydrocarbons by reaction of carbon monoxide and hydrogen in the presence of a catalyst at elevated temperature and pressure, in which a reactor system is used according to any of the claims 1 to 9.